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Proximity effect for asymmetrical three-layered FS structures in external magnetic field

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Abstract

We study asymmetrical three-layers F1F2S and F 1SF2 structures in an external parallel magnetic field. Assuming that all F and S layers are dirty, we solve the boundary value problem for the Usadel function. We calculate the critical temperature of in F 1F2S and F1SF2 systems as function of the F layers thicknesses and external magnetic field. © (2012) Trans Tech Publications.

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Keywords

Critical temperature, Proximity effect, Spin-valve device, Superconductivity